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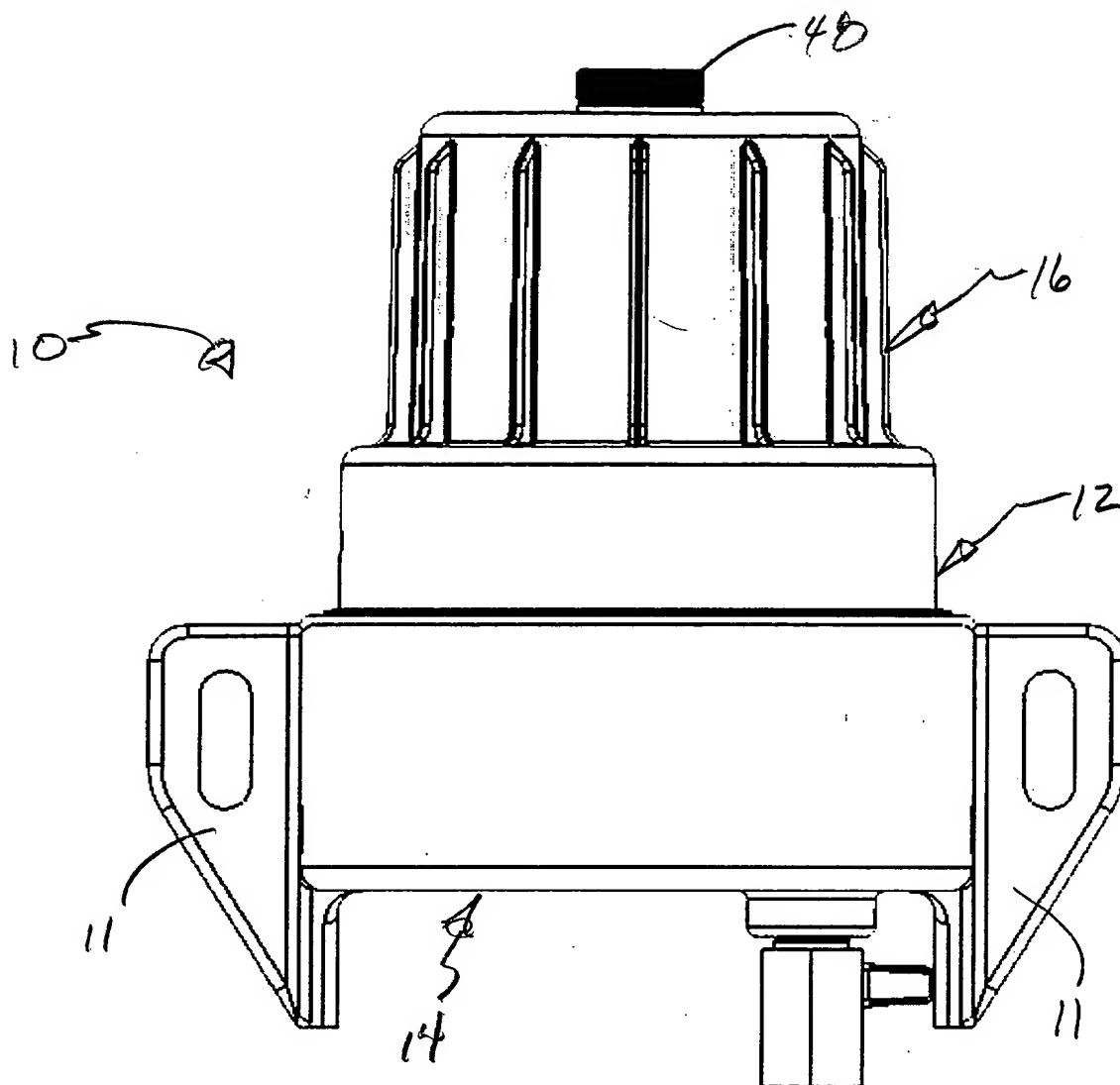


FIG. 1

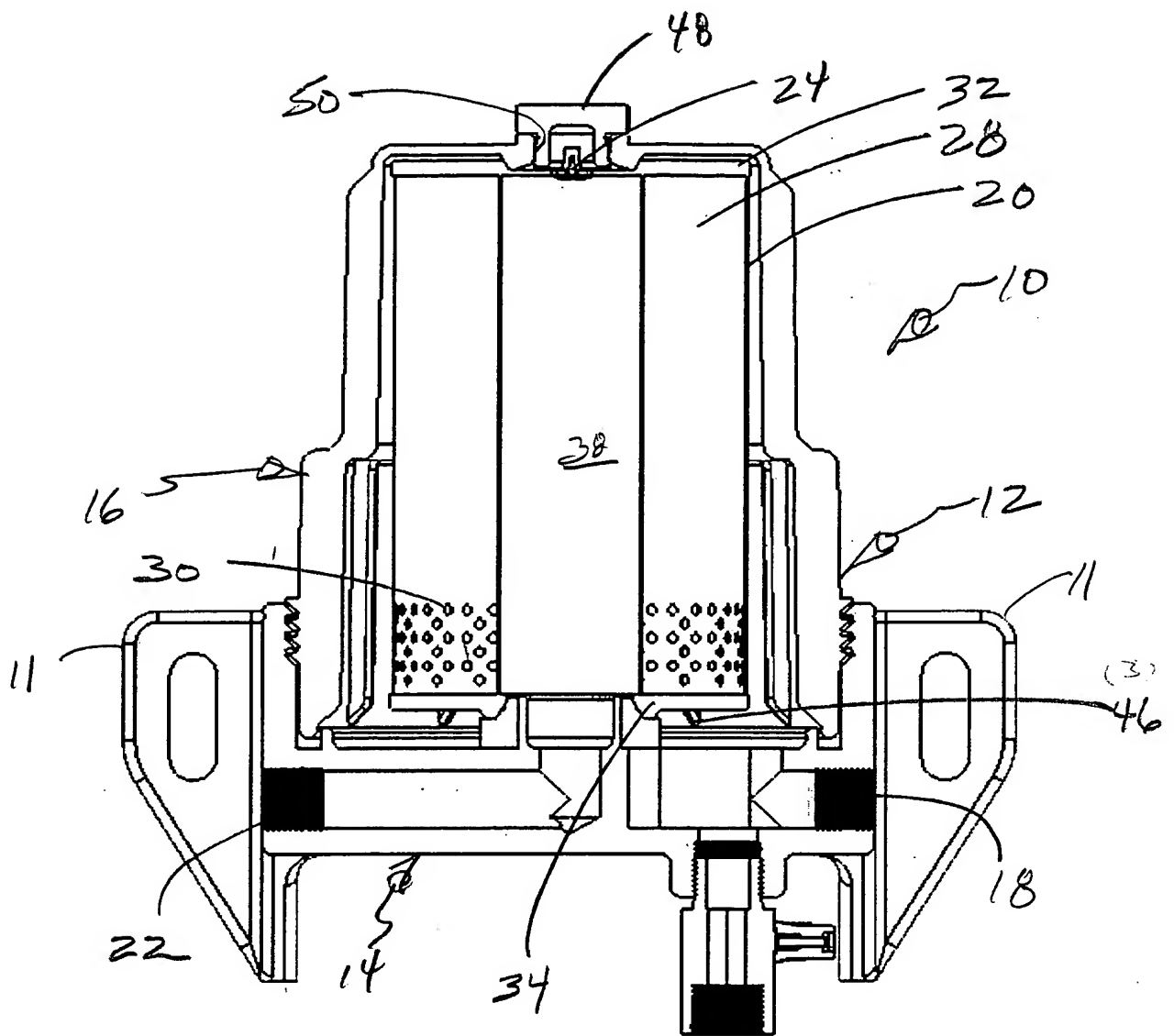


FIG. 2

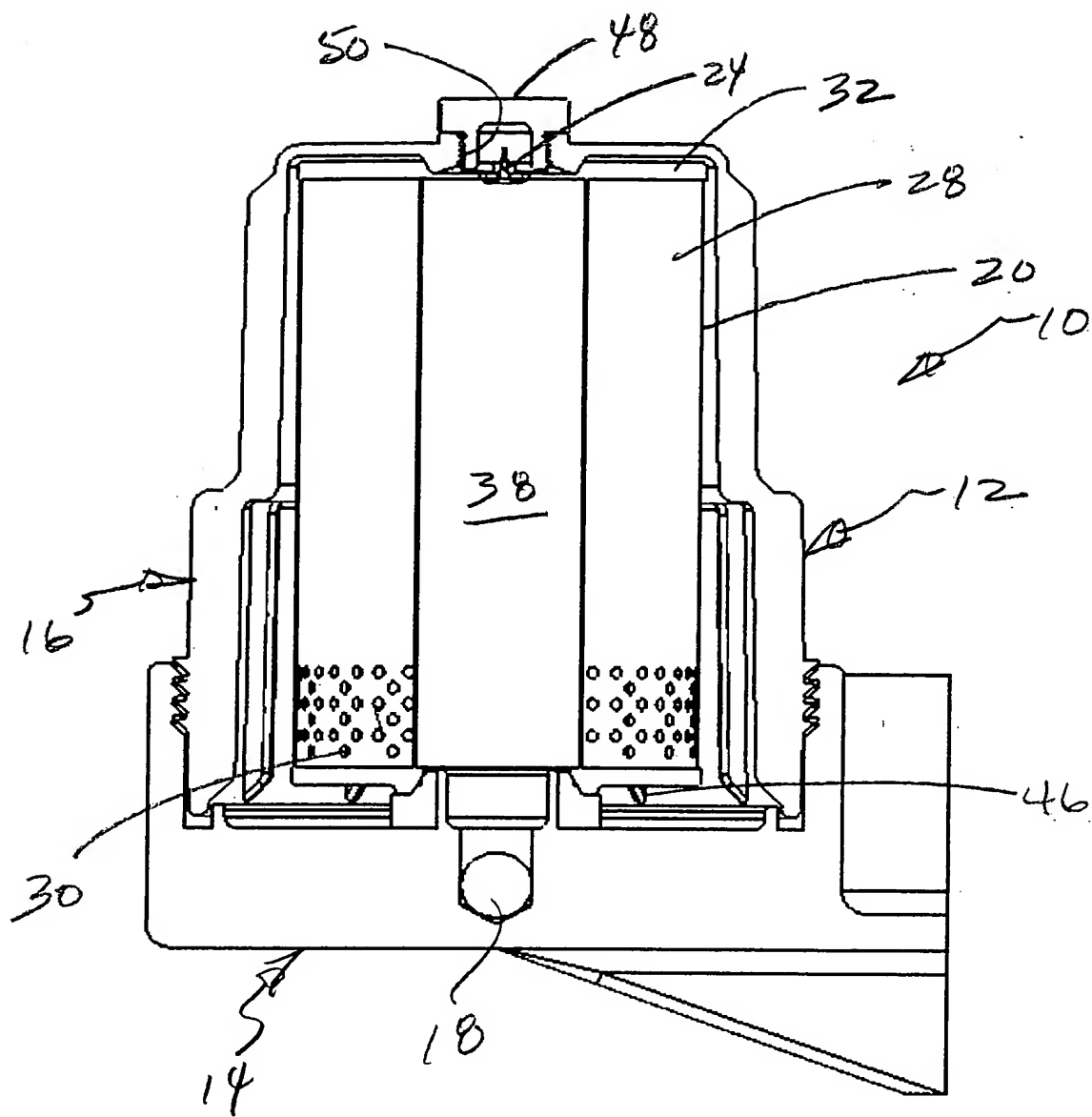


FIG. 3

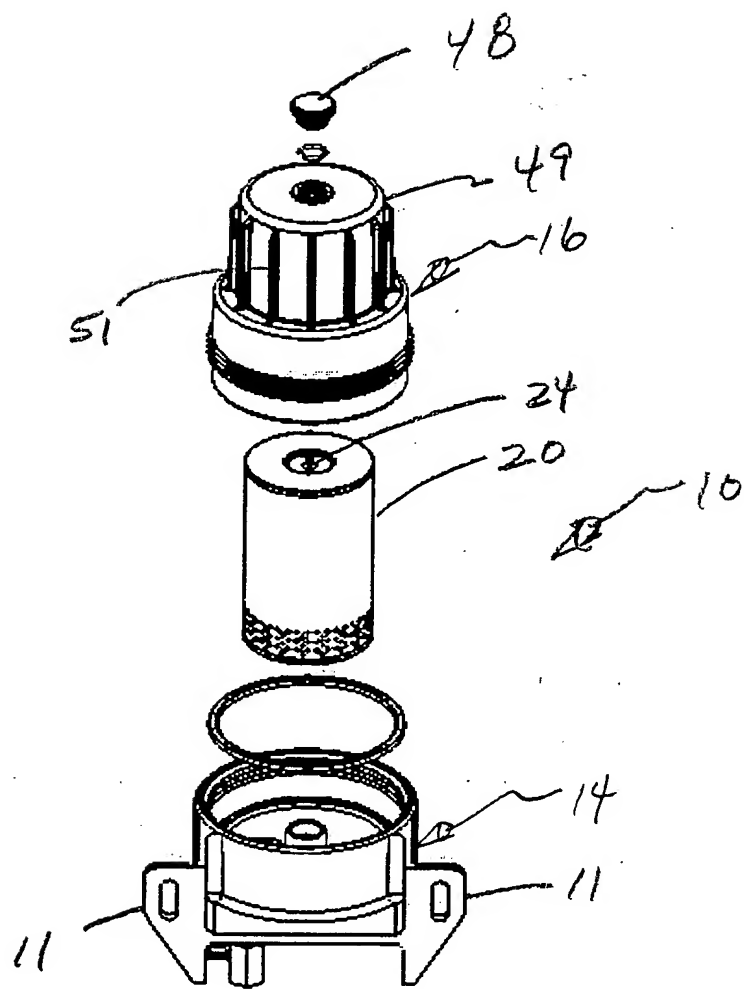


FIG 4

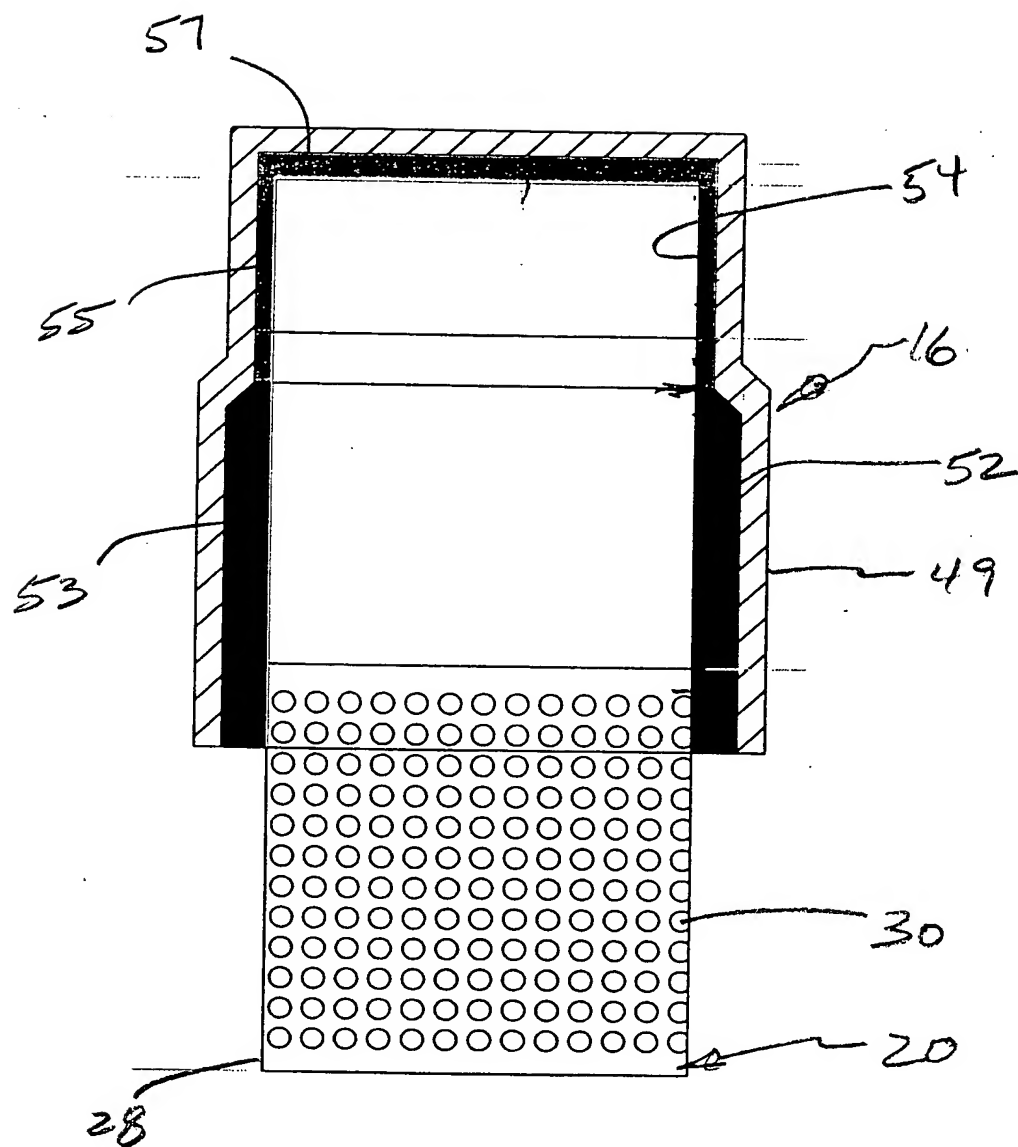


FIG. 5

Filter in Housing

Volume 1- Large volume		
Clearance	0.5	inch
Small Dia	3.82	inch
Large Dia	4.12	inch
height	3.25	inch
Volume 1	22.05	Cubic inch
Volume 1	0.36	Liters

Volume 2 - Small vertical volume		
Clearance	0.15	inch
Small Dia	3.82	inch
Large Dia	4.12	inch
height	1.5	inch
Volume 1	2.86	Cubic inch
Volume 1	0.05	Liters

Volume 3 - volume above filter		
Large Dia	4.12	inch
height	0.2	inch
Volume 1	2.67	Cubic inch
Volume 1	0.009	Liters

Total Volume =	0.42	Liters
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Air volume & Height Calculations

Initial new filter - no fuel		
P1 =	116	PSI
P2 =	7.58	atm
T2 =	333	K
V2 =	0.0597	liters
V2 =	0.0029	Cubic inch
Height below top		

Clean at system pressure		
P2 =	116	PSI
P2 =	7.58	atm
T2 =	333	K
V2 =	0.0597	liters
V2 =	0.0029	Cubic inch
Height below top		

Seeing is Believing end point		
P3 =	188	PSI
P3 =	12.77	atm
T3 =	333	K
V3 =	0.0318	liters
V3 =	0.0019	Cubic inch
Height below top		

Difference in height		Inches
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F16.6

Filter in Housing

Volume 1- Large volume		
Clearance	0.375	inch
Small Dia	3.82	inch
Large Dia	4.57	inch
height	2.75	inch
Volume 1	13.56	Cubic inch
Volume 1	0.22	Liters

Volume 2 - Small vertical volume		
Clearance	0.1	inch
Small Dia	3.82	inch
Large Dia	4.02	inch
height	2	inch
Volume 1	2.46	Cubic inch
Volume 1	0.04	Liters

Volume 3 - volume above filter		
Large Dia	4.02	inch
height	0.2	inch
Volume 1	2.54	Cubic inch
Volume 1	0.01	Liters

Air volume & Height Calculations

Initial new filter - no fuel		
P1 =	atm	
V1 =	0.22	liters

Clean at system pressure		
P2 =	60	PSI
P2 =		atm
V2 =	0.665	liters
V2 =	40.59	Cubic inch
Hight below top	2 inches	

Seeing is Believing end point		
P3 =	80	PSI
P3 =	5.44	atm
V3 =	6.638	liters
V3 =	39.024	Cubic inch
Hight below top	Full - at top	

Difference in height	2	Inches
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FIG. 7

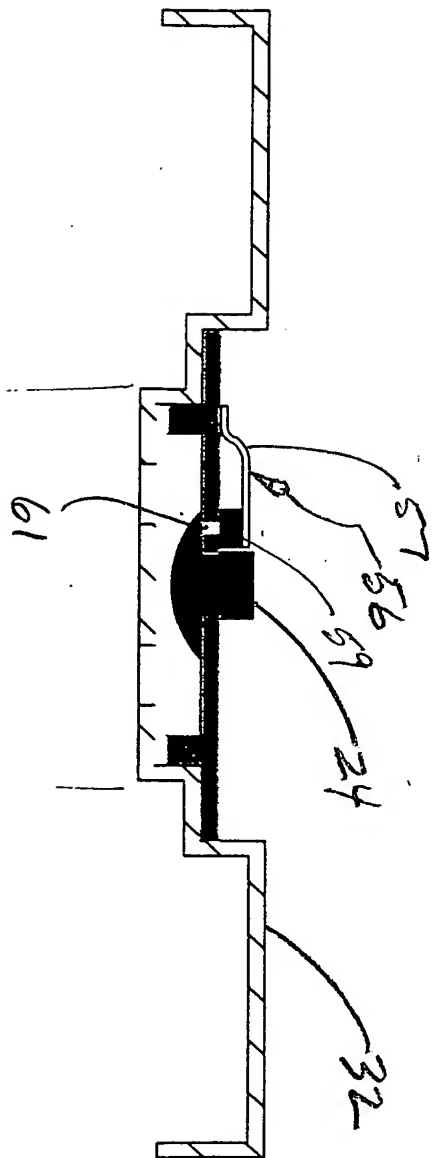


FIG. 8